

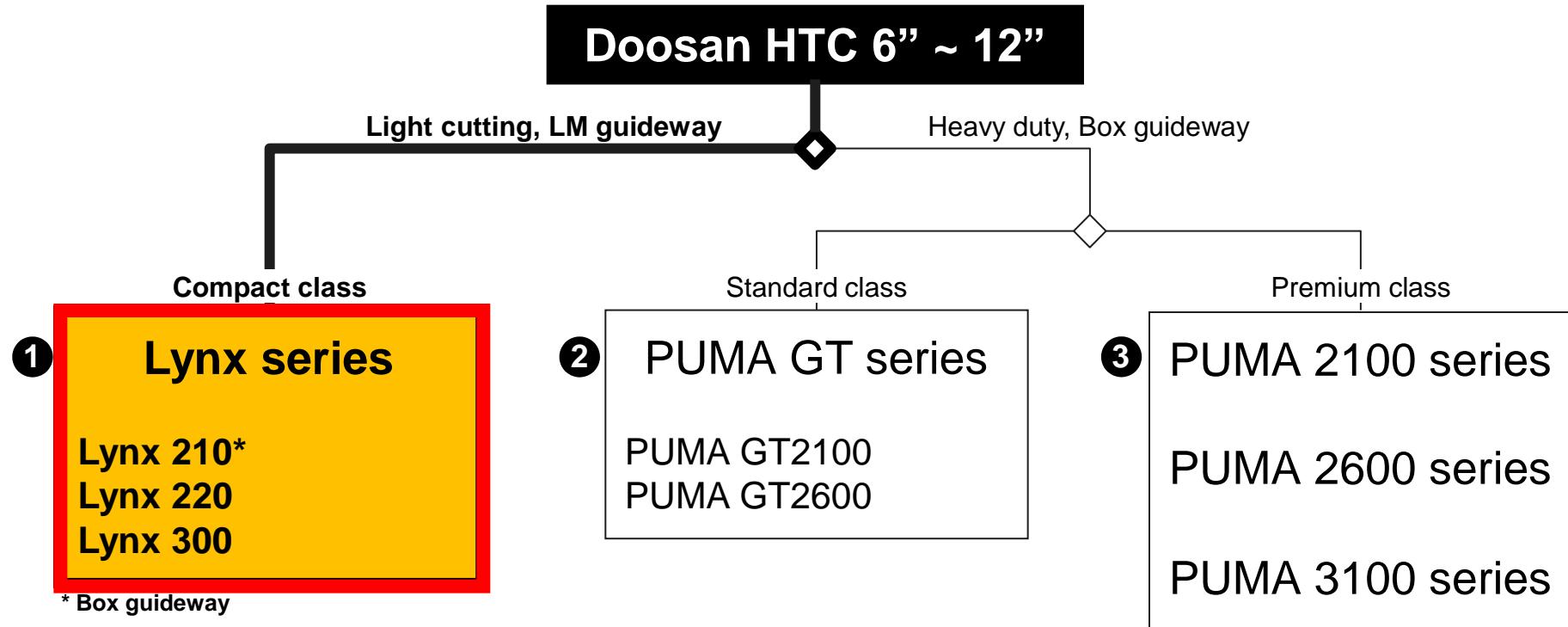
# A-1. Horizontal TC

	<b>a</b>	<b>b</b>	<b>c</b>	<b>d</b>	<b>e</b>	<b>f</b>	<b>g</b>				
Chuck size (inch)	Small size HTC		Medium size HTC	Large size HTC	Multi-tasking HTC		Twin turret HTC	2spindle HTC	Aluminum Wheel turn HTC		
	Lynx series	PUMA GT series	PUMA series		PUMA SMX series	PUMA MX series	PUMA TT series	PUMA TL series	PUMA HT/QL series	PUMA AW series	
											
6	Lynx 210 Lynx 220A					MX1600	TT1500		HT230T		
8	Lynx 220B Lynx 220C	GT2100	PUMA 2100			MX2100	TT1800 TT2000	TL2000	H250T QL200H		
10	Lynx 300	GT2100B GT2600	PUMA 2600		SMX2500	MX2600	TT2500	TL2500	H310T QL300H		
12			PUMA 2600B PUMA 3100	PUMA 400A		SMX3100	MX3100				
15				PUMA 400B							
18					PUMA 600						
21				PUMA 400C PUMA 480							
24					PUMA 700						
32					PUMA 800						
Big bore				PUMA 480D (275mm)	PUMA 800B (375mm)						
Wheel dia.										AW560(20") AW660(24")	



## a Small size HTC

Concept...



# Product line-up / Designation

Function								
Max. ing dia. mm)	Max. turning length (mm)	Gang	2 axis	M	S	MS	Y	SY
320	322		Lynx 220a					
	542		Lynx 220aL					
280	300		Lynx 210A					
320	322	Lynx 220G super	Lynx 220A					
	542		Lynx 220LA					
240	290			Lynx 220MA				
80	•S: 525 Others: 300			Lynx 220LMA	Lynx 220LSA	Lynx 220LMSA	Lynx 220YA	
280	300		Lynx 210B				Lynx 220LYA	Lynx 220LSYA
	305		Lynx 220B					
: 320	525		Lynx 220LB					
240	•2ax: 305 •M/Y: 290		Lynx 220C	Lynx 220MC			Lynx 220YC	
80	•2ax/S: 525 •Others: 300		Lynx 220LC	Lynx 220LMC	Lynx 220LSC	Lynx 220LMSC	Lynx 220LYC	Lynx 220LSYC
: 450	•2ax: 765 •M: 712		Lynx 300	Lynx 300M				

Upgrade

1

2

New

Lynx 220

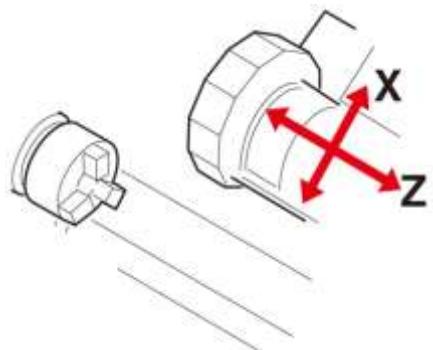
• [Suffix & Application] M : Milling, A/B/C : 6/8/8inch chuck size, L : Longer Z axis travel  
S : Sub spindle, Y : Y axis w/ M

• Lynx : Brand

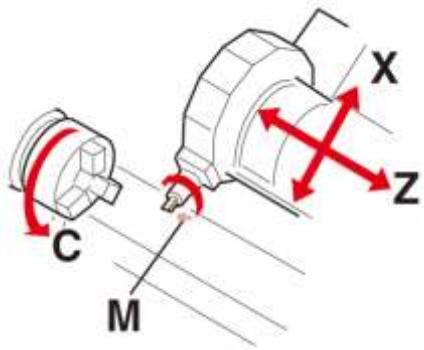


# MODEL VARIATION BY FUNCTIONS

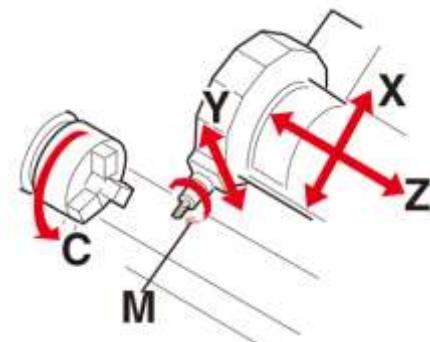
Turning



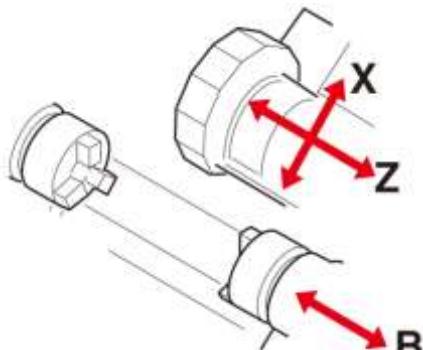
Mill-turning



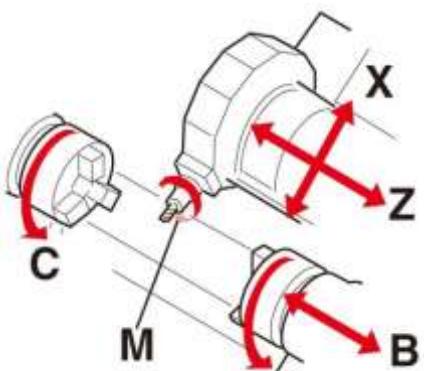
Y-axis mill-turning



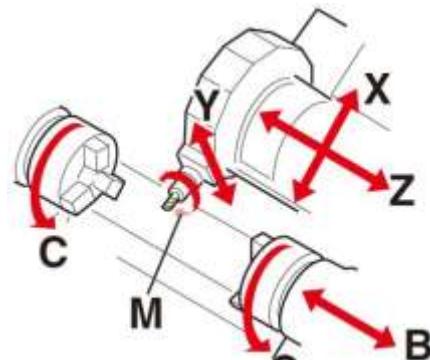
2-axis



M



Y



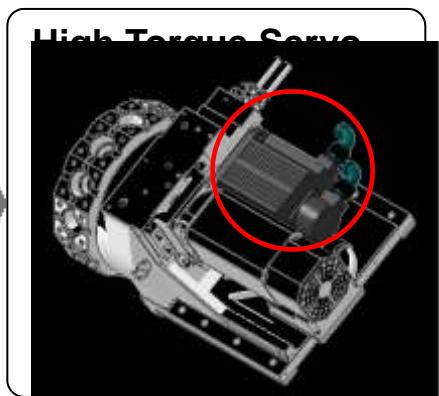
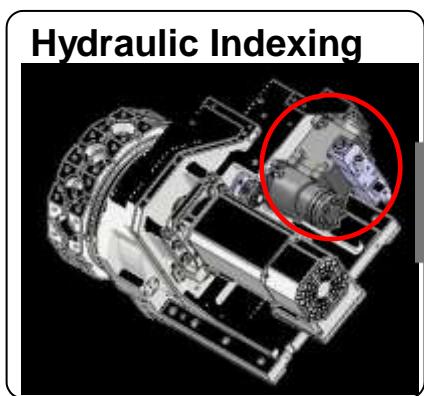
S

MS

SY

# 1 Lynx series Upgrade

New tool post with servo motor driven indexing for all Lynxes to improve reliability and productivity

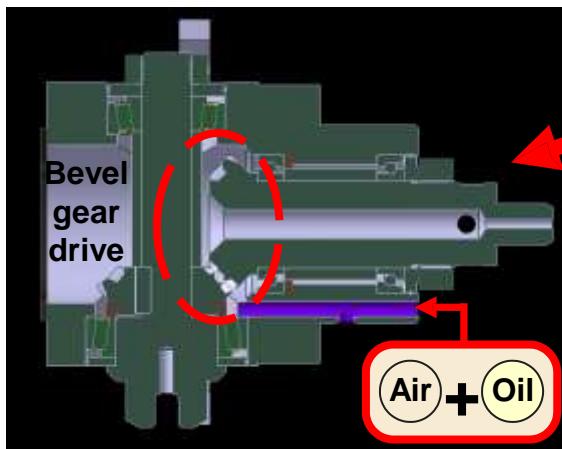


Model Group	Turret Indexing method	
	AS-IS	TO-BE
2axis	Hydraulic type	New Servo Type
M	Old Servo Type	
S/MS	Old Servo Type	
Y/SY	New Servo Type	

Model Group	TOOL DRIVE	
	AS-IS	TO-BE
2axis	N/A	N/A
M	Old type	
S/MS	Old type	
Y/SY	New Type (air+oil)	

New tool drive device for M/Y version models

- Silent driving
- Air / oil lubrication and cooling to reduce thermal growth from the milling drive train and extend the life of the drive gears

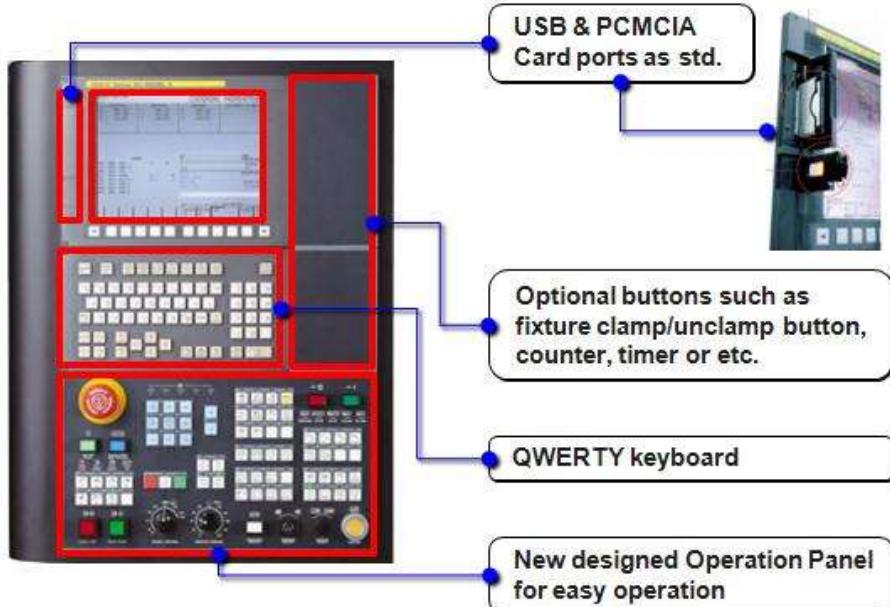


## 1 Lynx series Upgrade

Roller type LM guideway in all models & all axes for high rigidity & long life



New OP & Fanuc 0iTD for convenience



MODEL	LM guideway Type	
	AS-IS	TO-BE
Lynx 220/L	Ball	Roller
Lynx 220M/LM	Ball	Roller
Lynx 220LS/LMS	Roller	←
Lynx 220LY/LSY	Roller	←

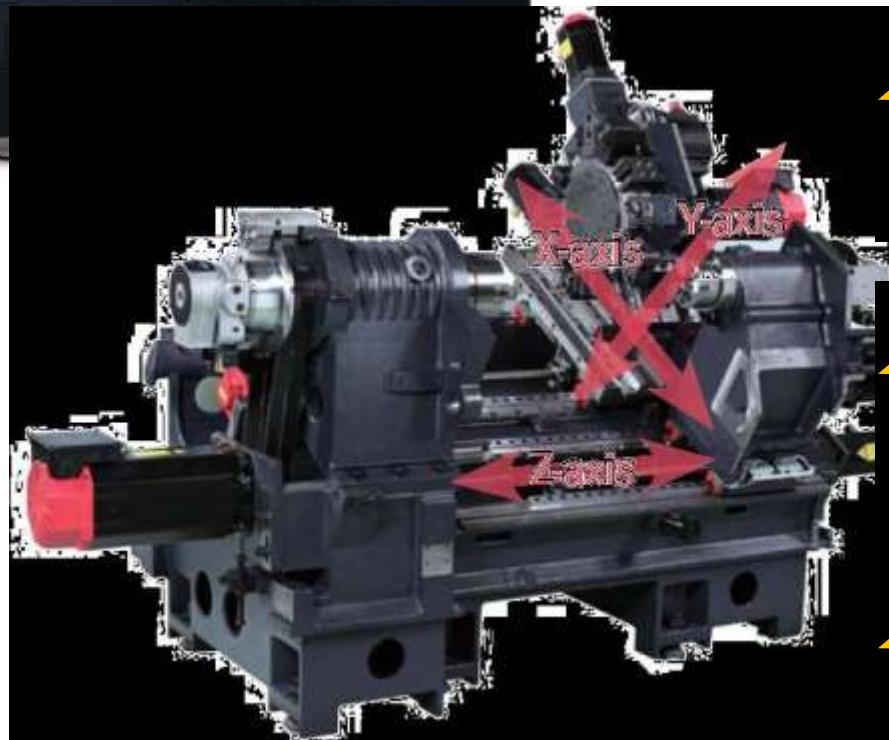
## 2 Lynx 220Y/LY/LSY New

### Sales points...



Compact Turning Center

- New addition of Y axis machine to Lynx 220M/LM & Lynx 220LMS for customers who require higher productivity from Lynx series or more additionally competitive choice as a compact class besides PUMA Y axis machine



- 1 Largest Y axis travel 105( $\pm 52.5$ )mm compared to the same class
- 2 Roller type LM guideway in X/Y/Z all axes for high rigidity & long life
- 3 New OP & Fanuc 0iTD with 10.4" Color LCD & EZ-i for convenience

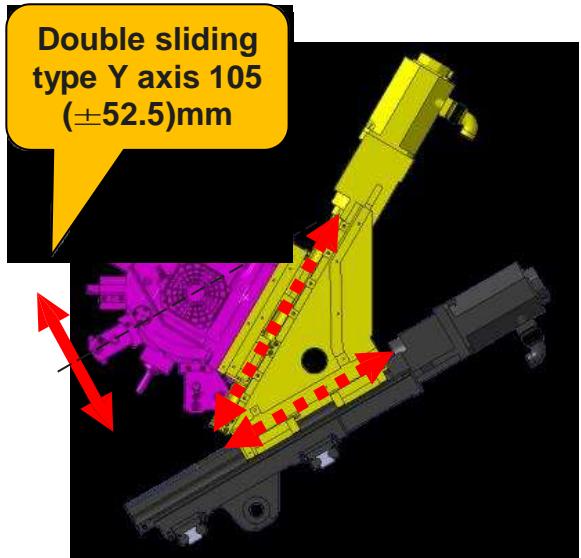
## 1 Sales point

### Largest Y axis travel 105( $\pm 52.5$ )mm compared to the same class

Customers can choose proper size machine and get wide machining capacity. Because Lynx 220 Y series provide various line-up and 105( $\pm 52.5$ )mm of Y-axis travel for off-center grooving, milling, tapping, and drilling.

2 bed frame (Z800/1250mm) for HTC 6"~15", Y 140mm is over spec. for HTC 6"/8" class

1 bed frame (Z560mm) for HTC 6"/8"



	Y 105mm	Y 100mm	Y 102mm	Y 105mm	Y 100mm	Y 140mm	Y 105mm
DOOSAN		Mazak	HINAKA	DOOSAN	DMG	MORI SEIKI	CMZ
L220YA	QTN 100-II MY	ST-10Y			NLX1500Y	TC15Y/800	B545Y
L220LYA					NLX1500SY	TC15Y/1350	B545YS
L220LSYA	QTN 100-II MSY				P2100Y		
L220YC					P2100LY	NLX2000Y	TC20Y/800
L220LYC	QTN 200-II MY	ST-20Y			P2100SY	TC20Y/1350	B565Y
L220LSYC	QTN 200-II MSY	DS-30Y			P2100LSY	NLX2000SY	TC20Y/1350
Roller	Roller	Ball					B565YS

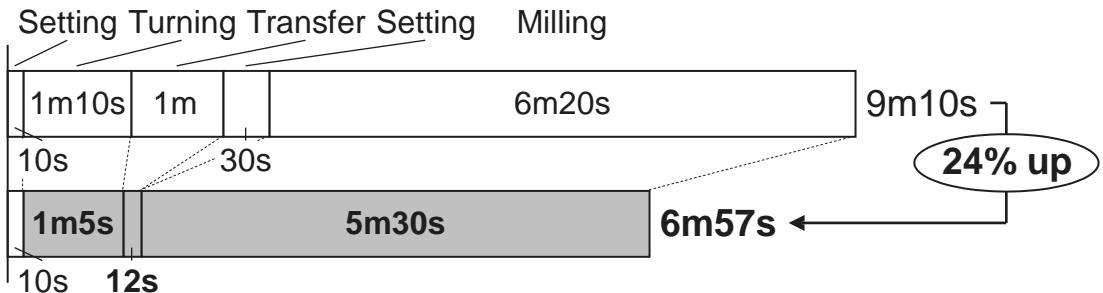
I M Guideway      BOX Guideway

One machine to obtain high productivity & accuracy, One set-up to save cutting time,  
One operator to reduce labor cost



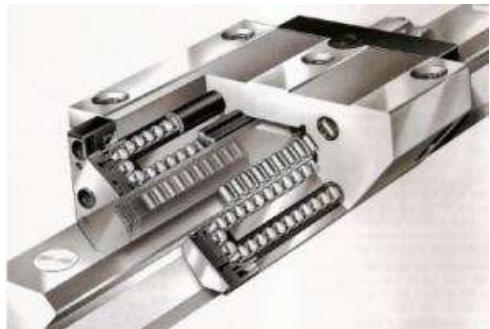
- Machinery Component
- Aluminum (AL7075) / Ø 70 x 35 mm
- 16 tools

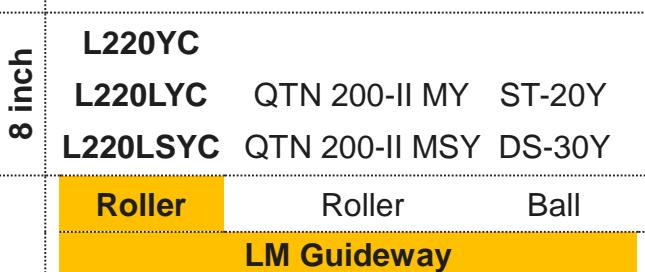
General process  
(TC+MC)  
**Lynx 220LSY**



## ② Sales point

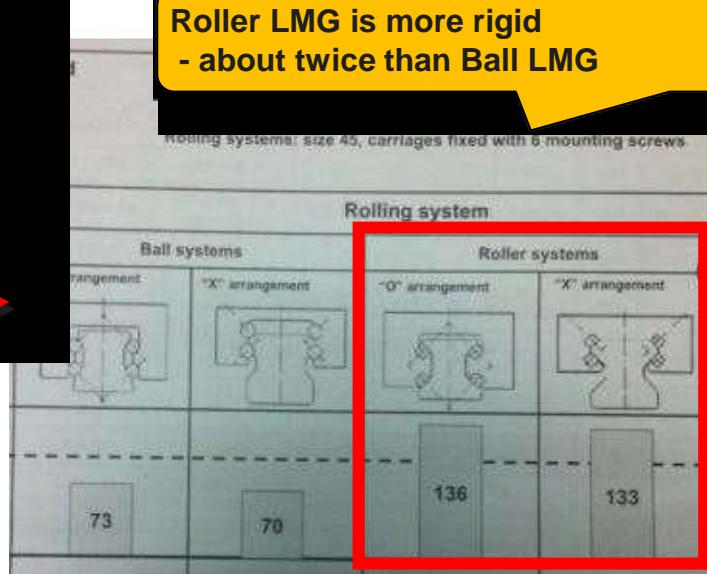
### Roller type LM guideway in X/Y/Z all axes for high rigidity & long life



 6 inch	<b>L220YA</b> QTN 100-II MY   ST-10Y <b>L220LYA</b> <b>L220LSYA</b> QTN 100-II MSY	NLX1500Y   TC15Y/800   B545Y NLX1500SY   TC15Y/1350   B545YS
 8 inch	<b>L220YC</b> <b>L220LYC</b> QTN 200-II MY   ST-20Y <b>L220LSYC</b> QTN 200-II MSY   DS-30Y	P2100Y P2100LY P2100SY P2100LSY   NLX2000Y   TC20Y/800   B565Y NLX2000SY   TC20Y/1350   B565YS
	<b>Roller</b> Roller      Ball <b>LM Guideway</b>	Box Guideway



**Roller LMG is more rigid  
- about twice than Ball LMG**



**Roller LMG's life is longer about twice than Ball LMG**

<b>Roller</b> ▶ <b>Ball</b> ▶	<b>X axis</b> RG35C-ZB      Service Life 22,930(km)
	<b>Y axis</b> RG45C-ZA      Service Life 88,345 (km) HG45C-ZA      41,654 (km)
<b>Roller</b> ▶ <b>Ball</b> ▶	<b>Z axis</b> RG45C-ZA      Service Life 116,088 (km) HG45C-ZA      60,185 (km)

### ③ Sales point

#### New OP & Fanuc 0iTD w ith 10.4" Colo r LCD & EZ -i for convenience

